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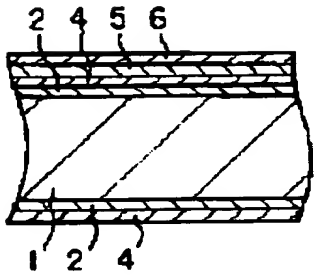
TITLE : COMPOSITE PLATED STEEL SHEET



ABSTRACT : PURPOSE: To obtain a composite plated steel sheet combining excellent pitting corrosion resistance, coating finishing characteristics, and coating adhesion by providing Zn-Ni plating layers of specific composition and Zn-Ni-(water- soluble high polymer) composite plating layers to both sides of a steel sheet, respectively, and further providing a chromate film layer and an organic resin film layer to one side of the steel sheet.

CONSTITUTION: Zn-Ni plating layers 2, containing ≥25wt:% Ni and having (1 to 1000)mg/m^2 plating weight, are provided to both sides of a steel sheet 1. Then, Zn-Ni-(water-soluble high polymer) composite plating layers 4, containing 5-16% Ni and 0.01-30% water-soluble high polymer and having (10 to 60)g/m^2 plating weight, are provided to the above plating layers. It is preferable to use, as the water-soluble high polymer, an anionic, cationic, or amphoteric organic high polymer having 1,000 to 1,000,000 weight average molecular weight and containing specific aromatic ring, hydroxyl group, sulfone group, etc. Further, a chromate film layer 5 of (10 to 150)mg/m^2 plating weight, expressed in terms of Cr, is provided to at least one surface, and then, an organic resin film layer 6 of 0.3-3μm thickness is provided on this layer.